US009567081B1

(12) **United States Patent**
Beckman et al.

(10) **Patent No.: US 9,567,081 B1**
(45) **Date of Patent: Feb. 14, 2017**

(54) **MANEUVERING A PACKAGE FOLLOWING IN-FLIGHT RELEASE FROM AN UNMANNED AERIAL VEHICLE (UAV)**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **14/752,671**

(22) Filed: **Jun. 26, 2015**

(51) **Int. Cl.**

B64C 1/20	(2006.01)
B64C 1/22	(2006.01)
B64D 47/00	(2006.01)
B64D 1/12	(2006.01)
B64C 39/02	(2006.01)
B64D 1/10	(2006.01)

(52) **U.S. Cl.**
CPC ***B64D 1/12*** (2013.01); ***B64C 39/024*** (2013.01); ***B64D 1/10*** (2013.01); *B64C 2201/128* (2013.01)

(58) **Field of Classification Search**
CPC B64D 1/00; B64D 1/02; B64D 1/08; B64D 1/10; B64D 1/12; B64D 9/00; B64D 19/00; B64C 39/024; B64C 2201/027; B64C 2201/12; B64C 2201/128
See application file for complete search history.

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(57) **ABSTRACT**

A package delivery system can be implemented to forcefully propel a package from an unmanned aerial vehicle (UAV), while the UAV is in motion. The UAV can apply a force onto the package that alters its descent trajectory from a parabolic path to a vertical descent path. The package delivery system can apply the force onto the package in a number of different ways. For example, pneumatic actuators, electromagnets, spring coils, and parachutes can generate the force that establishes the vertical descent path of the package. Further, the package delivery system can also monitor the package during its vertical descent. The package can be equipped with one or more control surfaces. Instructions can be transmitted from the UAV via an RF module that cause the one or more controls surfaces to alter the vertical descent path of the package to avoid obstructions or to regain a stable orientation.

20 Claims, 14 Drawing Sheets